

Access DB# 106301
(69)

SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester's Full Name: JUSTICE CAMPBELL Examiner #: 79703 Date: 11/11/03
Art Unit: 2178 Phone Number 305 5764 Serial Number: 69/635999
Mail Box and Bldg/Room Location: 4Y05/PK2 Results Format Preferred (circle): PAPER DISK E-MAIL

If more than one search is submitted, please prioritize searches in order of need.

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: Text Reflow in a structured Document

Inventors (please provide full names): Robert Ayess, Richard Sites

Earliest Priority Filing Date: 08/09/2000

For Sequence Searches Only Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.

Text Reflow in PDF, PDL, or postscript
Adding Word-wrap to PDF, PDL, or postscript
when resizing
Translating ~~PDF~~ or converting PDF or postscript
to handheld devices (cell phones, PDA's, etc)

PDF = Portable Document Format

PDL = page description language

PDA = personal digital assistant

STAFF USE ONLY

Searcher: David Holliday

Searcher Phone #: 308-7794

Searcher Location: CPM 4B30

Date Searcher Picked Up: 11-18-03

Date Completed: 11-20-03

Searcher Prep & Review Time: 65

Clerical Prep Time: _____

Online Time: 249

Type of Search

NA Sequence (#) _____

AA Sequence (#) _____

Structure (#) _____

Bibliographic ✓

Litigation _____

Fulltext ✓

Patent Family _____

Other _____

Vendors and cost where applicable

STN _____

Dialog 1213 %

Questel/Orbit _____

Dr.Link _____

Lexis/Nexis _____

Sequence Systems _____

WWW/Internet ✓

Other (specify) _____



STIC Search Report

EIC 2100

STIC Database Tracking Number: 108301

TO: Joshua Campbell
Location: 4405
Art Unit : 2178
Thursday, November 20, 2003

Case Serial Number: 09635999

From: David Holloway
Location: EIC 2100
PK2-4B30
Phone: 308-7794

david.holloway@uspto.gov

Search Notes

Dear Examiner Campbell,

Attached please find your search results for above-referenced case.
Please contact me if you have any questions or would like a re-focused search.

David



Set	Items	Description
S1	1460825	PDA OR PORTABLE()DIGITAL()ASSISTANT? OR CELLPHONE? OR (CELLULAR OR MOBILE OR CELL)()PHONE? OR PALMTOP? OR PALM? ? OR PALMPILOT? OR NEWTON? OR BLACKBERRY? OR RAZOR? OR HANDHELD?
S2	376664	PDF OR PORTABLE()DOCUMENT OR POSTSCRIPT? OR POST()SCRIPT? - OR PS
S3	6874060	WORDWRAP? OR TEXTWRAP? OR WRAP? OR BREAK? OR DIVID? OR SPLIT? OR REFLOW? OR REWRAP?
S4	8785387	CONVERT? OR CONVERSION OR DOWNSIZE? OR REDUC? OR SHRINK? OR RESIZE? OR REFORMAT?
S5	16208	PAGE()DESCRIPTION? OR PDL? ?
S6	20128014	TEXT OR CHARACTER? OR TEXTLINE? OR LINE? OR WORD? ? OR TERM? OR PHRASE? OR SENTENCE? OR PARAGRAPH?
S7	1628	S1 (15N) S2
S8	145	S7 (15N) (S3 OR S4)
S9	305	S7 (15N) (S5 OR S6)
S10	31	S8(S)S9
S11	23	S1(10N)S2(10N)S3
S12	53	S10 OR S11
S13	64	S1(S)S2(S)S3(S) (S4 OR S5)
S14	114	S12 OR S13
S15	67	RD (unique items)
S16	36	S15 NOT PY>2000
S17	26	S16 NOT PD>20000809
File	275:	Gale Group Computer DB(TM) 1983-2003/Nov 19 (c) 2003 The Gale Group
File	47:	Gale Group Magazine DB(TM) 1959-2003/Nov 19 (c) 2003 The Gale group
File	75:	TGG Management Contents(R) 86-2003/Nov W2 (c) 2003 The Gale Group
File	636:	Gale Group Newsletter DB(TM) 1987-2003/Nov 19 (c) 2003 The Gale Group
File	16:	Gale Group PROMT(R) 1990-2003/Nov 19 (c) 2003 The Gale Group
File	624:	McGraw-Hill Publications 1985-2003/Nov 19 (c) 2003 McGraw-Hill Co. Inc
File	484:	Periodical Abs Plustext 1986-2003/Nov W3 (c) 2003 ProQuest
File	613:	PR Newswire 1999-2003/Nov 20 (c) 2003 PR Newswire Association Inc
File	813:	PR Newswire 1987-1999/Apr 30 (c) 1999 PR Newswire Association Inc
File	141:	Readers Guide 1983-2003/Oct (c) 2003 The HW Wilson Co
File	239:	Mathsci 1940-2003/Dec (c) 2003 American Mathematical Society
File	370:	Science 1996-1999/Jul W3 (c) 1999 AAAS
File	696:	DIALOG Telecom. Newsletters 1995-2003/Nov 19 (c) 2003 The Dialog Corp.
File	553:	Wilson Bus. Abs. FullText 1982-2003/Oct (c) 2003 The HW Wilson Co
File	621:	Gale Group New Prod. Annou. (R) 1985-2003/Nov 20 (c) 2003 The Gale Group
File	674:	Computer News Fulltext 1989-2003/Nov W2 (c) 2003 IDG Communications
File	88:	Gale Group Business A.R.T.S. 1976-2003/Nov 18 (c) 2003 The Gale Group
File	369:	New Scientist 1994-2003/Nov W2 (c) 2003 Reed Business Information Ltd.
File	160:	Gale Group PROMT(R) 1972-1989 (c) 1999 The Gale Group
File	635:	Business Dateline(R) 1985-2003/Nov 19 (c) 2003 ProQuest Info&Learning
File	15:	ABI/Inform(R) 1971-2003/Nov 19 (c) 2003 ProQuest Info&Learning
File	9:	Business & Industry(R) Jul/1994-2003/Nov 19 (c) 2003 Resp. DB Svcs.

File 13:BAMP 2003/Nov W2
 (c) 2003 Resp. DB Svcs.
File 810:Business Wire 1986-1999/Feb 28
 (c) 1999 Business Wire
File 610:Business Wire 1999-2003/Nov 20
 (c) 2003 Business Wire.
File 647:CMP Computer Fulltext 1988-2003/Nov W3
 (c) 2003 CMP Media, LLC
File 98:General Sci Abs/Full-Text 1984-2003/Oct
 (c) 2003 The HW Wilson Co.
File 148:Gale Group Trade & Industry DB 1976-2003/Nov 20
 (c)2003 The Gale Group
File 634:San Jose Mercury Jun 1985-2003/Nov 19
 (c) 2003 San Jose Mercury News

17/3,K/1 (Item 1 from file: 275)
DIALOG(R)File 275:Gale Group Computer DB(TM)
(c) 2003 The Gale Group. All rts. reserv.

02390833 SUPPLIER NUMBER: 61531799 (USE FORMAT 7 OR 9 FOR FULL TEXT)
**PDAs are perfect for e-books : Imagine walking into a bookstore, popping
your handheld into a cradle and downloading any novel you want. (personal
digital assistants/palm devices) (Technology Information)**

Greiner, Lynn

Computing Canada, 26, 8, 18

April 14, 2000

ISSN: 0319-0161 LANGUAGE: English RECORD TYPE: Fulltext

WORD COUNT: 659 LINE COUNT: 00053

... every time the user synchronizes with a PC.

There's even software available that can **convert** many PC file
types, such as **PDF** , **Word** , Excel and PowerPoint, into a **Palm** -friendly
format.

CE devices have their "Pocket" MS Office applications built in.

Pretty soon PC...

17/3,K/6 (Item 1 from file: 47)
DIALOG(R)File 47:Gale Group Magazine DB(TM)
(c) 2003 The Gale group. All rts. reserv.

05558371 SUPPLIER NUMBER: 60597710 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Adobe Shows CoolType. (Evaluation)
HILTS, PAUL
Publishers Weekly, 247, 12, 12
March 20, 2000
DOCUMENT TYPE: Evaluation ISSN: 0000-0019 LANGUAGE: English
RECORD TYPE: Fulltext
WORD COUNT: 345 LINE COUNT: 00030

... bottom of the first and continue scrolling down the page." One of the benefits of **reflowing text** is that it allows readers to change the size of type in **PDF** files for better readability on the small screens of **handheld** devices.

Handheld devices will definitely be a part of Adobe's future, according to an announcement the...

17/3,K/7 (Item 1 from file: 636)
DIALOG(R)File 636:Gale Group Newsletter DB(TM)
(c) 2003 The Gale Group. All rts. reserv.

04612469 Supplier Number: 60831143 (USE FORMAT 7 FOR FULLTEXT)
**Amazon.com and Adobe to broaden availability of eBooks; Adobe to provide
mechanism for Macintosh users to buy and read eBooks.**
M2 Presswire, pNA
March 28, 2000
Language: English Record Type: Fulltext
Document Type: Magazine/Journal; Trade
Word Count: 741

... LCD screen as much as 300 percent, making reading much easier on even the smallest **handheld** devices. Providing sharper text and graphics on LCD screens will help make the plethora of **handheld** devices a more suitable platform for reading longer documents. Adobe is also developing technologies to **resize** and **reflow** content to fit any device, while maintaining the high-fidelity and printing capabilities of the Adobe **PDF** format.

About Adobe Systems
Incorporated Founded in 1982, Adobe Systems Incorporated
(www.adobe.com) builds...

17/3,K/9 (Item 1 from file: 16)
DIALOG(R)File 16:Gale Group PROMT(R)
(c) 2003 The Gale Group. All rts. reserv.

07665885 Supplier Number: 63818005 (USE FORMAT 7 FOR FULLTEXT)
BCL Takes Magellan Technology to a New Level.
Business Wire, p0287
August 2, 2000
Language: English Record Type: Fulltext
Document Type: Newswire; Trade
Word Count: 604

... and searchable document on the web.

Unlike previous versions, Magellan(R) 4.2 also makes **PDF** documents accessible on the smallest of display devices -- ebooks such as the RocketBook(R) and SoftBook(R), and PDAs such as the **Palm** (R). Because of the small size of the displays of these **handhelds**, users often have to settle for fragmented or minuscule content when browsing the web. Magellan(R) 4.2 **reflows** -- rather than **shrinks** -- content, so that documents can be displayed on these smaller screens with the original document...

17/3,K/11 (Item 3 from file: 16)
DIALOG(R)File 16:Gale Group PROMT(R)
(c) 2003 The Gale Group. All rts. reserv.

07409570 Supplier Number: 62400263

Acrobat in your palm.

Mello, John P., Jr.

Mass High Tech, p37(1)

May 15, 2000

Language: English Record Type: Abstract

Document Type: Magazine/Journal; Trade

ABSTRACT:

...written by Chris Vandendorpe called PDF2Doc is a free plug-in for Adobe Acrobat or **PDF** files. PDF2Doc will extract **text** from **PDF** documents and **convert** it into **Palm** computer document format. One drawback of the product is that it can be used only...

...It will not work with the Acrobat Reader that Adobe distributes for free. Once users **convert text** from **PDF** files into **Palm** format, they will need readers in their **handheld** computers to view it. A few such readers are being offered over the Internet, some...

17/3,K/23 (Item 2 from file: 610)
DIALOG(R)File 610:Business Wire
(c) 2003 Business Wire. All rts. reserv.

00328794 20000725207B0763 (USE FORMAT 7 FOR FULLTEXT)
BCL's SimpleEBook Opens ebooks to the Web
Business Wire
Tuesday, July 25, 2000 12:43 EDT
JOURNAL CODE: BW LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT
DOCUMENT TYPE: NEWSWIRE
WORD COUNT: 656

TEXT:

...handhelds now, to access content that's
already out there.

BCL Computers has a new **conversion** tool that gives **handheld** users
high-quality
access to web content even when they're using the smallest displays.
SimpleEBook(R) **reflows** content so that documents can be displayed on
smaller
screens with "flow" intact. It uses the tagging capabilities and **reflow**
technology of HTML 3.2 to **convert PDF**, as well as Word Perfect, Word
and Power
Point (and in the near future, Excel...
...such as the RocketBook(R) or SoftBook(R), and
hand-held devices such as the **Palm** (R).

17/3,K/26 (Item 2 from file: 148)
DIALOG(R)File 148:Gale Group Trade & Industry DB
(c)2003 The Gale Group. All rts. reserv.

11728825 SUPPLIER NUMBER: 59207115 (USE FORMAT 7 OR 9 FOR FULL TEXT)
**Electronic Books Market Set to Explode As Adobe Introduces New E-Commerce
Solution.**

PR Newswire, 3556

Feb 7, 2000

LANGUAGE: English RECORD TYPE: Fulltext

WORD COUNT: 999 LINE COUNT: 00090

... LCD screen as much as 300 percent, making reading much easier on even the smallest **handheld** devices. Providing sharper text and graphics on LCD screens will help make the plethora of **handheld** devices a more suitable platform for reading longer documents. Adobe is also developing technologies to **resize** and **reflow** content to fit any device, while maintaining the high-fidelity and printing capabilities of the Adobe **PDF** format.

Acrobat Reader software, available on both Windows(R) and Macintosh platforms, makes purchasing and...

?ds;show files

Set	Items	Description
S1	201810	PDA OR PORTABLE()DIGITAL()ASSISTANT? OR CELLPHONE? OR (CELLULAR OR MOBILE OR CELL)()PHONE? OR PALMTOP? OR PALM? ? OR PALMPILOT? OR NEWTON? OR BLACKBERRY? OR RAZOR? OR HANDHELD?
S2	155987	PDF OR PORTABLE()DOCUMENT OR POSTSCRIPT? OR POST()SCRIPT? - OR PS
S3	1535756	WORDWRAP? OR TEXTWRAP? OR WRAP? OR BREAK? OR DIVID? OR SPLIT? OR REFLOW? OR REWRAP?
S4	4942729	CONVERT? OR CONVERSION OR DOWNSIZE? OR REDUC? OR SHRINK? OR RESIZE? OR REFORMAT?
S5	7301	PAGE()DESCRIPTION? OR PDL? ?
S6	12565399	TEXT OR CHARACTER? OR TEXTLINE? OR LINE? OR WORD? ? OR TERM? OR PHRASE? OR SENTENCE? OR PARAGRAPH?
S7	229	S1 (15N) S2
S8	7	S7 (15N) (S3 OR S4)
S9	28	S7 (15N) (S5 OR S6)
S10	34	S8 OR S9
S11	26565	(SMALL? OR REDUC? OR SHRINK? OR TINY OR S1) (3N) (SCREEN? OR DISPLAY? OR LCD? ? OR VIEWER? OR MONITOR?)
S12	32	S11(15N)S2
S13	26	S12(15N) (S4 OR S5 OR S6)
S14	42	S1 AND S2 AND S3
S15	99	S10 OR S13 OR S14
S16	70	RD (unique items)
S17	44	S16 NOT PY>2000
S18	44	S17 NOT PD>20000809
File	8: Ei	Compendex(R) 1970-2003/Nov W2 (c) 2003 Elsevier Eng. Info. Inc.
File	35: Dissertation	Abs Online 1861-2003/Oct (c) 2003 ProQuest Info&Learning
File	65: Inside	Conferences 1993-2003/Nov W3 (c) 2003 BLDSC all rts. reserv.
File	2: INSPEC	1969-2003/Nov W2 (c) 2003 Institution of Electrical Engineers
File	94: JICST-EPlus	1985-2003/Nov W3 (c) 2003 Japan Science and Tech Corp(JST)
File	111: TGG Natl.	Newspaper Index(SM) 1979-2003/Nov 17 (c) 2003 The Gale Group
File	233: Internet & Personal	Comp. Abs. 1981-2003/Jul (c) 2003, EBSCO Pub.
File	144: Pascal	1973-2003/Nov W2 (c) 2003 INIST/CNRS
File	434: SciSearch(R)	Cited Ref Sci 1974-1989/Dec (c) 1998 Inst for Sci Info
File	34: SciSearch(R)	Cited Ref Sci 1990-2003/Nov W3 (c) 2003 Inst for Sci Info
File	99: Wilson Appl.	Sci & Tech Abs 1983-2003/Oct (c) 2003 The HW Wilson Co.
File	95: TEME-Technology & Management	1989-2003/Nov W1 (c) 2003 FIZ TECHNIK

Set	Items	Description
S1	75021	PDA OR PORTABLE()DIGITAL()ASSISTANT? OR CELLPHONE? OR (CELLULAR OR MOBILE OR CELL)()PHONE? OR PALMTOP? OR PALM? ? OR PALMPILOT? OR NEWTON? OR BLACKBERRY? OR RAZOR? OR HANDHELD?
S2	83776	PDF OR PORTABLE()DOCUMENT OR POSTSCRIPT? OR POST()SCRIPT? - OR PS
S3	568254	WORDWRAP? OR TEXTWRAP? OR WRAP? OR BREAK? OR DIVID? OR SPLIT? OR REFLOW? OR REWRAP?
S4	1013558	CONVERT? OR CONVERSION OR DOWNSIZE? OR REDUC? OR SHRINK? OR RESIZE? OR REFORMAT?
S5	3863	PAGE()DESCRIPTION? OR PDL? ?
S6	1377355	TEXT OR CHARACTER? OR TEXTLINE? OR LINE? OR WORD? ? OR TERM? OR PHRASE? OR SENTENCE? OR PARAGRAPH?
S7	68	S1 (15N) S2
S8	5	S7 (15N) (S3 OR S4)
S9	9	S7 (15N) (S5 OR S6)
S10	13	S8 OR S9
S11	3	S10 AND IC=G06F?
S12	25538	(SMALL? OR REDUC? OR SHRINK? OR TINY OR S1)(3N)(SCREEN? OR DISPLAY? OR LCD? ? OR VIEWER?)
S13	11	S12 (15N) S2
S14	6	S13 (15N) (S4 OR S5 OR S6)
S15	14	S11 OR S13 OR S14
S16	14	IDPAT (sorted in duplicate/non-duplicate order)
S17	14	IDPAT (primary/non-duplicate records only)

File 348:EUROPEAN PATENTS 1978-2003/Nov W02
(c) 2003 European Patent Office

File 349:PCT FULLTEXT 1979-2002/UB=20031113,UT=20031106
(c) 2003 WIPO/Univentio

17/5,K/8 (Item 8 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
(c) 2003 WIPO/Univentio. All rts. reserv.

00916565 **Image available**

METHOD AND SYSTEM FOR ENHANCED DETAIL-IN-CONTEXT VIEWING

PROCEDE ET SYSTEME AMELIORES DE VISUALISATION DE DETAILS D'UN CONTEXTE

Patent Applicant/Assignee:

IDELIX SOFTWARE INC, #400-1122 Mainland Street, Vancouver, British
Columbia V6B 5L1, CA, CA (Residence), CA (Nationality), (For all
designated states except: US)

Patent Applicant/Inventor:

BAAR David J P, 3534 West 3rd Avenue, Vancouver, British Columbia V6R 1L7
, CA, CA (Residence), CA (Nationality), (Designated only for: US)

COWPERTHWAIT David J, Apt.311, 3420 Bell Avenue, Burnaby, British
Columbia V3J 1M7, CA, CA (Residence), CA (Nationality), (Designated
only for: US)

TIGGES Mark H A, 106-1683 Adanac Stree, Vancouver, British Columbia V5I
2C7, CA, CA (Residence), CA (Nationality), (Designated only for: US)

Legal Representative:

FASKEN MARTINEAU DUMOULIN LLP (agent), Toronto-Dominion Bank Tower, Box
20, Suite 4200, Toronto Dominion Centre, Toronto, Ontario M5K 1N6, CA,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200250654 A2-A3 20020627 (WO 0250654)

Application: WO 2001CA1816 20011219 (PCT/WO CA0101816)

Priority Application: CA 2328795 20001219

Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU

CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP

KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD

SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR

(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Main International Patent Class: G06F-003/033

Publication Language: English

Filing Language: English

Fulltext Availability:

Detailed Description

Claims

Fulltext Word Count: 5666

English Abstract

An improved method for display of a transitional region of interest while
transitioning between a first region of interest and a second region of
interest within visual information on a display screen of a computer. The
method comprising the steps of applying a transitional transformation to
the visual information and displaying the transitional transformed visual
information on the display screen. The transitional transformation
requiring a reduced calculation for transforming the visual information
in the transitional region.

French Abstract

L'invention porte sur un procede ameliore de presentation d'une zone de
transition d'interet separant une premiere zone d'interet d'une deuxieme
zone d'interet, interieures a des informations visuelles presentees sur
l'ecran d'un ordinateur. Le procede consiste a appliquer une
transformation de transition a l'information visuelle, puis a presenter
sur l'ecran l'information ainsi transformee. Ladite transformation de
transition ne necessite que des calculs reduits.

Legal Status (Type, Date, Text)

Publication 20020627 A2 Without international search report and to be
republished upon receipt of that report.

Search Rpt 20030327 Late publication of international search report

Republication 20030327 A3 With international search report.

Fulltext Availability:

Detailed Description

Detailed Description

... to the user. This method can be used to achieve the more effective presentation of **PDF** file content on **small display** surfaces including **handheld** computers. This aspect of the invention can be implemented with pre-placed EPS lenses on...

17/5,K/10 (Item 10 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
(c) 2003 WIPO/Univentio. All rts. reserv.

00905531 **Image available**

**TRANSFORMING A SOURCE DOCUMENT TO A DESIRED TARGET DOCUMENT
APPAREIL, PROCEDE ET SYSTEME DE TRANSFORMATION DE DONNEES**

Patent Applicant/Assignee:

DESKNET INC, 83 Maiden Lane, New York, NY 10038, US, US (Residence), US
(Nationality)

Inventor(s):

FITZSIMONS Edgar Michael, 207 East 74th Street, New York, NY 10021, US,
FITZSIMONS Brian G, 15 Fox Hill Lane, Short Hills, NJ 07078, US,
LANGENBACH Erik Richard, 2 Juengst Road, Croton Falls, NY 10519, US,

Legal Representative:

HUGHES Christopher A (agent), Morgan & Finnegan, L.L.P., 345 Park Avenue,
New York, NY 10154, US,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200239649 A2-A3 20020516 (WO 0239649)

Application: WO 2001US50971 20011019 (PCT/WO US0150971)

Priority Application: US 2000241661 20001020; US 2001932656 20010817; US
2001932517 20010817

Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU

CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP

KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PH PL PT RO RU

SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR

(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Main International Patent Class: **G06F-005/00**

Publication Language: English

Filing Language: English

Fulltext Availability:

Detailed Description

Claims

Fulltext Word Count: 16934

English Abstract

An apparatus, method and system to automatically associate page elements, and convert (221) and transform (222) between disparate data (201) and device format types. This allows for the ability to transform (222) a single data source (201) into multiple output composites (230) suitable for deployment in disparate media outlets and on disparate output devices. Such automatic generation of disparate composites (230) allows for the ability to take content written once in any given format and have said content automatically regenerated for any desired output outlet. The present disclosure further provides the ability to create and edit templates and data, and saved edited changes affecting a single or a collection of templates. The invention teaches how to create associations from a piece of data and any of its page elements. Such associations facilitate the automatic transformation (222) of the data (201) into various output formats.

French Abstract

L'invention concerne un appareil, un procede et un systeme qui permettent d'associer automatiquement des elements de page et de les convertir et transformer en types de format de donnees et de dispositifs varies. Cela permet de transformer une source de donnees simple en plusieurs donnees mixtes de sortie pouvant etre deployees de facon appropriee dans des media et dispositifs de sortie varies. Cette production automatique de donnees mixtes variees permet de selectionner un contenu initialement ecrit dans un format donne et de le reconstituer automatiquement pour n'importe quel dispositif de sortie desire. Le procede de l'invention permet en outre de creer et modifier des gabarits et des donnees, les modifications enregistrees pouvant s'appliquer a un seul ou a plusieurs gabarits. Le procede de l'invention montre comment etabliir des associations a partir d'un ensemble de donnees ou de l'un quelconque de

ses elements de page. De telles associations facilitent la transformation automatique des donnees en divers formats de sortie.

Legal Status (Type, Date, Text)

Publication 20020516 A2 Without international search report and to be republished upon receipt of that report.

Search Rpt 20030306 Late publication of international search report

Republication 20030306 A3 With international search report.

Main International Patent Class: G06F-005/00

Fulltext Availability:

Detailed Description

Detailed Description

... of reading only certain types of formats. For example, if the output device is a **PDA** that can only read **PDF** format files, and the currently transformed document is in XML, a data **conversion** will need to take place. The output devices known display formats may be supplied by...

Set	Items	Description
S1	55133	PDA OR PORTABLE()DIGITAL()ASSISTANT? OR CELLPHONE? OR (CELLULAR OR MOBILE OR CELL)()PHONE? OR PALMTOP? OR PALM? ? OR PALMPILOT? OR NEWTON? OR BLACKBERRY? OR RAZOR? OR HANDHELD?
S2	24035	PDF OR PORTABLE()DOCUMENT OR POSTSCRIPT? OR POST()SCRIPT? - OR PS
S3	1074127	WORDWRAP? OR TEXTWRAP? OR WRAP? OR BREAK? OR DIVID? OR SPLIT? OR REFLOW? OR REWRAP?
S4	3717113	CONVERT? OR CONVERSION OR DOWNSIZE? OR REDUC? OR SHRINK? OR RESIZE? OR REFORMAT?
S5	2080	PAGE()DESCRIPTION? OR PDL? ?
S6	3994463	TEXT OR CHARACTER? OR TEXTLINE? OR LINE? OR WORD? ? OR TERM? OR PHRASE? OR SENTENCE? OR PARAGRAPH?
S7	55	S1 AND S2
S8	14	S7 AND (S3 OR S4)
S9	25	S7 AND (S5 OR S6)
S10	33	S8 OR S9
S11	12	S10 AND IC=G06F?
S12	28987	(SMALL? OR REDUC? OR SHRINK? OR TINY OR S1) (3N) (SCREEN? OR DISPLAY? OR LCD? ? OR VIEWER?)
S13	31	S12 AND S2
S14	28	S13 AND (S4 OR S5 OR S6)
S15	27	S14 NOT S11

File 347:JAPIO Oct 1976-2003/Jul(Updated 031105)
(c) 2003 JPO & JAPIO

File 350:Derwent WPIX 1963-2003/UD,UM &UP=200374
(c) 2003 Thomson Derwent

11/5/4 (Item 1 from file: 350)
DIALOG(R) File 350:Derwent WPIX
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015648188 **Image available**
WPI Acc No: 2003-710371/200367
XRPX Acc No: N03-567953

Page description language converter for use with cellular
telephone, converts received page description language file into
intermediate formats which are converted to printer-specific printer
language file to be printed

Patent Assignee: HEWLETT-PACKARD CO (HEWP); OLEINIK J H (OLEI-I); REVEL D
(REVE-I)

Inventor: OLEINIK J H; REVEL D
Number of Countries: 002 Number of Patents: 002
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 20030142335	A1	20030731	US 200262976	A	20020130	200367 B
GB 2387938	A	20031029	GB 2003927	A	20030115	200371

Priority Applications (No Type Date): US 200262976 A 20020130

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
US 20030142335	A1	12	G06F-015/00	
GB 2387938	A		G06F-003/12	

Abstract (Basic): US 20030142335 A1

NOVELTY - The page description language (PDL) converter
converts the printer-independent PDL file from a client device (102)
into an interim format (302) which is converted to another interim
format (308) through a module interface (206). The interim format (308)
is converted into a printer-specific printer language (PL) file (116)
which is printed by a printer (118). The interim formats (302,308) are
identical or different from each other.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the
following:

(1) a page description language (PDL) file converting
method;

(2) a computer readable medium storing PDL file conversion
program.

USE - For converting printer-independent page description
language (PDL) files, postscript file, portable document format
(PDF) file, mark-up language files such as extensible mark-up
language (XML) file and hypertext mark-up language (HTML) file and
files in Microsoft word and Microsoft power point formats for desktop
and laptop computers, cellular telephone, personal digital assistant (PDA)
and other mobile devices connected to networks, such as Ethernet,
intranet, extranet, internet, local area network (LAN) and wide area
network (WAN).

ADVANTAGE - The PDL to printer language file conversion is
performed without installing specific printer drivers in the client
devices, thereby avoiding the need for memory and processing power for
printer drivers.

DESCRIPTION OF DRAWING(S) - The figure shows the block diagram of
the PDL file conversion system.

PDL file conversion system (100)
client device (102)
PDL converter device (104)
PDL file (114)
printer language file (116)
printer (118)
hard copy (120)
module interface (206)
interim formats (302,308)
pp; 12 DwgNo 3/6

Title Terms: PAGE; DESCRIBE; LANGUAGE; CONVERTER ; CELLULAR; TELEPHONE;
CONVERT ; RECEIVE; PAGE; DESCRIBE; LANGUAGE; FILE; INTERMEDIATE; FORMAT;
CONVERT ; PRINT; SPECIFIC; PRINT; LANGUAGE; FILE; PRINT

Derwent Class: P74; T01; W01

International Patent Class (Main): G06F-003/12 ; G06F-015/00

International Patent Class (Additional): B41B-001/00

File Segment: EPI; EngPI

11/5/7 (Item 4 from file: 350)
DIALOG(R)File 350:Derwent WPIX
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014919129 **Image available**
WPI Acc No: 2002-739836/200280
Related WPI Acc No: 2002-673883; 2002-697669; 2002-697670; 2002-705974;
2002-722602; 2002-722603; 2003-038896
XRPX Acc No: N02-582839

Computer readable medium for operating information output apparatus, has software to conform portion of content to be output into selected images with image attributes corresponding to output devices

Patent Assignee: CHANG W H (CHAN-I); LIU C Y (LIUC-I)

Inventor: CHANG W H; LIU C Y

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 20020097433	A1	20020725	US 2001262764	A	20010119	200280 B
			US 200253765	A	20020118	

Priority Applications (No Type Date): US 2001262764 P 20010119; US
200253765 A 20020118

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
US 20020097433	A1	40	G06F-015/00	Provisional application US 2001262764

Abstract (Basic): US 20020097433 A1

NOVELTY - The computer readable medium has an information apparatus data output software to establish a communication channel between information apparatus and output devices. Image attributes corresponding to the devices are received, and at least a portion of content to be output is conformed into selected output images with image attributes to generate output data for rendering.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is included for information apparatus operating method.

USE - Computer readable medium comprising software for managing output of content from information apparatus such as computing devices, PDAs, **mobile phones**, smart phones, pagers, digital and video cameras, internet appliances, e-books, information pads, digital or web pads, to output devices such as printers, copiers, facsimile, image and/or video display devices e.g. TVs, projectors and audio output devices in various applications such as printing of e-mail, PowerPoint presentation documents, etc.

ADVANTAGE - Allows information apparatus to output contents such as graphics/ **text** information to virtually any output device without the need to install any dedicated device dependent driver or applications. Enables mobile devices with less memory space and processing capabilities to implement data output functions easily.

DESCRIPTION OF DRAWING(S) - The figure shows a schematic block diagram of hardware/software components of output controller.

pp; 40 DwgNo 6A/13

Title Terms: COMPUTER; READ; MEDIUM; OPERATE; INFORMATION; OUTPUT;
APPARATUS; SOFTWARE; CONFORM; PORTION; CONTENT; OUTPUT; SELECT; IMAGE;
IMAGE; ATTRIBUTE; CORRESPOND; OUTPUT; DEVICE

Derwent Class: P75; T01; W04

International Patent Class (Main): G06F-015/00

International Patent Class (Additional): B41J-001/00

File Segment: EPI; EngPI

11/5/9 (Item 6 from file: 350)
DIALOG(R)File 350:Derwent WPIX
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014669978 **Image available**
WPI Acc No: 2002-490682/200252
XRPX Acc No: N02-387876

Transition region of interest display for handheld computer, involves applying transitional transformation requiring reduced calculations, to visual information for transforming to transitional transformed visual information

Patent Assignee: IDELIX SOFTWARE INC (IDEL-N); ADVANCED NUMERICAL METHODS LTD (ADNU-N); BAAR D J P (BAAR-I); COWPERTHWAIT D J (COWP-I); TIGGES M H A (TIGG-I)

Inventor: BAAR D J P; COWPERTHWAIT D J; TIGGES M H A; BARR D J P

Number of Countries: 097 Number of Patents: 005

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 200250654	A2	20020627	WO 2001CA1816	A	20011219	200252 B
US 20020089520	A1	20020711	US 200121313	A	20011219	200252
CA 2328795	A1	20020619	CA 2328795	A	20001219	200254
CA 2365426	A1	20020619	CA 2365426	A	20011219	200254
AU 200215785	A	20020701	AU 200215785	A	20011219	200264

Priority Applications (No Type Date): CA 2328795 A 20001219

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
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WO 200250654	A2	E	24	G06F-003/033	
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Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW

Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZM ZW

US 20020089520	A1			G09G-005/00	
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CA 2328795	A1	E		G09G-005/36	
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CA 2365426	A1	E		G09G-005/36	
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AU 200215785	A			G06F-003/033	Based on patent WO 200250654
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Abstract (Basic): WO 200250654 A2

NOVELTY - A transitional transformation requiring **reduced** calculations, is applied to a visual information, for transforming the visual information into transitional transformed visual information which is displayed on a display screen of a computer.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are included for the following:

- (1) Transition displaying method;
- (2) Visual information display method; and
- (3) Data carrier storing instructions for improving display of transitional region.

USE - For displaying transitional region of interest within visual information of **portable document** format (**PDF**) files e.g. newspaper page, on display screen of computer.

ADVANTAGE - Achieves more effective presentation of **portable document** format file content on small display surfaces of **handheld** computers.

DESCRIPTION OF DRAWING(S) - The figure explains a screen capture of **PDF** file for newspaper page that has been shrunk to fit display screen.

pp; 24 DwgNo 4/5

Title Terms: TRANSITION; REGION; INTEREST; DISPLAY; COMPUTER; APPLY; TRANSITION; TRANSFORM; REQUIRE; **REDUCE** ; CALCULATE; VISUAL; INFORMATION; TRANSFORM; TRANSITION; TRANSFORM; VISUAL; INFORMATION

Derwent Class: T01

International Patent Class (Main): **G06F-003/033** ; G09G-005/00; G09G-005/36

International Patent Class (Additional): **G06F-003/14** ; **G06F-017/00** ;

G09G-005/373

File Segment: EPI

11/5/10 (Item 7 from file: 350)
DIALOG(R)File 350:Derwent WPIX
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014659552 **Image available**
WPI Acc No: 2002-480256/200251
XRPX Acc No: N02-379284

Document structuring method for delivery through Internet, involves
decomposing document into nodes based on document model and associating
nodes with regions of virtual layout space

Patent Assignee: BOGHOSIAN B M (BOGH-I); CINCRO COMMUNICATIONS CORP
(CINC-N); KO J D (KOJD-I); TRAYNOR C A (TRAY-I)
Inventor: BOGHOSIAN B M; KO J D; TRAYNOR C A
Number of Countries: 096 Number of Patents: 003
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 200246946	A1	20020613	WO 2001US46017	A	20011206	200251 B
US 20020112082	A1	20020815	US 2000251584	A	20001207	200256
			US 20013348	A	20011206	
AU 200228738	A	20020618	AU 200228738	A	20011206	200262

Priority Applications (No Type Date): US 2000251584 P 20001207; US 20013348
A 20011206

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

WO 200246946 A1 E 64 G06F-015/16

Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA
CH CN CO CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS
JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL
PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW

Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR
IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZM ZW

US 20020112082 A1 G06F-015/16 Provisional application US 2000251584

AU 200228738 A G06F-015/16 Based on patent WO 200246946

Abstract (Basic): WO 200246946 A1

NOVELTY - A document is decomposed into nodes in accordance with
the model of the document. The resolution levels of the nodes are
associated with respective regions of virtual layout space and the
nodes are scheduled for delivery.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are included for the
following:

(1) Document structuring system; and

(2) Document delivery method.

USE - For structuring documents in HTML, MS **WORD**, **Postscript**,
XML, **PDF**, Flash for delivery over Internet to client devices such as
PDA, pocket PC, **handheld** PC, laptop PC, wire **line** computer.

ADVANTAGE - Enables a small sized client device to retrieve a
document regardless of the available bandwidth and the size of the
document and without introducing any new protocols or markup languages.

DESCRIPTION OF DRAWING(S) - The figure shows a flowchart explaining
the document delivery process.

pp; 64 DwgNo 2/11

Title Terms: DOCUMENT; STRUCTURE; METHOD; DELIVER; THROUGH; DECOMPOSE;
DOCUMENT; NODE; BASED; DOCUMENT; MODEL; ASSOCIATE; NODE; REGION; VIRTUAL;
LAYOUT; SPACE

Derwent Class: T01

International Patent Class (Main): G06F-015/16

International Patent Class (Additional): G06F-007/00 ; G06F-015/00

File Segment: EPI

Set	Items	Description
S1	55133	PDA OR PORTABLE() DIGITAL() ASSISTANT? OR CELLPHONE? OR (CELLULAR OR MOBILE OR CELL)() PHONE? OR PALMTOP? OR PALM? ? OR PALMPILOT? OR NEWTON? OR BLACKBERRY? OR RAZOR? OR HANDHELD?
S2	24035	PDF OR PORTABLE() DOCUMENT OR POSTSCRIPT? OR POST()SCRIPT? - OR PS
S3	1074127	WORDWRAP? OR TEXTWRAP? OR WRAP? OR BREAK? OR DIVID? OR SPLIT? OR REFLOW? OR REWRAP?
S4	3717113	CONVERT? OR CONVERSION OR DOWNSIZE? OR REDUC? OR SHRINK? OR RESIZE? OR REFORMAT?
S5	2080	PAGE() DESCRIPTION? OR PDL? ?
S6	3994463	TEXT OR CHARACTER? OR TEXTLINE? OR LINE? OR WORD? ? OR TERM? OR PHRASE? OR SENTENCE? OR PARAGRAPH?
S7	55	S1 AND S2
S8	14	S7 AND (S3 OR S4)
S9	25	S7 AND (S5 OR S6)
S10	33	S8 OR S9
S11	12	S10 AND IC=G06F?
S12	28987	(SMALL? OR REDUC? OR SHRINK? OR TINY OR S1) (3N) (SCREEN? OR DISPLAY? OR LCD? ? OR VIEWER?)
S13	31	S12 AND S2
S14	28	S13 AND (S4 OR S5 OR S6)
S15	27	S14 NOT S11

File 347: JAPIO Oct 1976-2003/Jul (Updated 031105)

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File 350: Derwent WPIX 1963-2003/UD, UM & UP=200374

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15/5/14 (Item 2 from File: 350)
DIALOG(R) File 350: Derwent WPIX
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015357850 **Image available**
WPI Acc No: 2003-418788/200339
XRPX Acc No: N03-334183

Handheld device such as laptop computer considers direction of user inputs detected by respective user input controls, based on which content is panned and zoomed in or out

Patent Assignee: KORHONEN P (KORH-I); MACKENZIE I S (MACK-I); SILFVERBERG M (SILF-I); NOKIA CORP (OYNO); NOKIA INC (OYNO)
Inventor: KORHONEN P; MACKENZIE I S; SILFVERBERG M
Number of Countries: 100 Number of Patents: 002
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 20030043114	A1	20030306	US 2001944165	A	20010904	200339 B
WO 200321568	A1	20030313	WO 2002IB3567	A	20020903	200339

Priority Applications (No Type Date): US 2001944165 A 20010904

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 20030043114	A1		9	G09G-005/08	
WO 200321568	A1	E		G09G-005/00	

Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SI SK SL TJ TM TN TR TT TZ UA UG UZ VN YU ZA ZM ZW

Designated States (Regional): AT BE BG CH CY CZ DE DK EA EE ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SK SL SZ TR TZ UG ZM ZW

Abstract (Basic): US 20030043114 A1

NOVELTY - A controller controls content displayed in a display screen (103) in a predetermined manner, so that content is panned in particular direction and zoomed in or out in response to direction of user inputs detected by respective user input controls such as trackballs, roller wheels, keypad button, touch pads, joysticks, control buttons (105,107,109,111) located on the sides of the handheld device.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is included for a method for manipulating content **displayed on display screen of handheld device.**

USE - Handheld device such as laptop computer, personal digital assistant (PDA), tablet computer, special purpose computing device, mobile telephone especially for zooming in and zooming out of data files including Internet web pages, maps, **word** processing documents, spreadsheet, portable data format (**PDF**) files and any other file that contains data that is interpreted and displayed on display screen.

ADVANTAGE - Larger amounts of information can be easily **displayed on small display screen** because the user easily manipulates the information on the display, while allowing for efficient, ergonomic use of the device.

DESCRIPTION OF DRAWING(S) - The figure shows a perspective view of the handheld device.

display screen (103)
control buttons (105,107,109,111)
pp; 9 DwgNo 1/5

Title Terms: DEVICE; COMPUTER; DIRECTION; USER; INPUT; DETECT; RESPECTIVE; USER; INPUT; CONTROL; BASED; CONTENT; PAN
Derwent Class: P85; T01; T04; W01
International Patent Class (Main): G09G-005/00; G09G-005/08
File Segment: EPI; EngPI

15/5/23 (Item 11 from file: 350)
DIALOG(R) File 350: Derwent WPIX
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011327190 **Image available**
WPI Acc No: 1997-305094/199728
XRPX Acc No: N97-252638

Write-in/read-out method for reduction image processing circuit - by
cancelling fixing of read-out memory to one field memory and fixing of
fixed postscript lump memory to other field memory, after completing
write-in and read-out of image data from other field memory

Patent Assignee: SANYO ELECTRIC CO LTD (SAOL)

Inventor: CHIDA K; SHIMIZU Y

Number of Countries: 002 Number of Patents: 003

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
JP 9116828	A	19970502	JP 95267108	A	19951016	199728 B
US 5963221	A	19991005	US 96732845	A	19961015	199948
JP 3378710	B2	20030217	JP 95267108	A	19951016	200316

Priority Applications (No Type Date): JP 95267108 A 19951016

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
JP 9116828	A		13	H04N-005/45	
US 5963221	A			H04N-005/45	
JP 3378710	B2		14	H04N-005/45	Previous Publ. patent JP 9116828

Abstract (Basic): JP 9116828 A

The method involves fixing a read-out memory to one field memory
among two field memories, when the rate of **reduction** of an image is
changed.

A fixed **postscript** lump memory is fixed to the other field
memory, and an image data is written in at the new rate of **reduction** .

The image data written at the field memory is read. Fixing of the
memories is cancelled after completing the write-in and read-out of the
image data from the field memory.

ADVANTAGE - Reliably performs corresponding display processing when
rate of image **reduction** is changed. Performs change of rate of
reduction without performing window **display** of **reduction** image.
Prevents generation of remarkable distortion in display image.

Dwg.1/9

Title Terms: WRITING; READ; METHOD; **REDUCE** ; IMAGE; PROCESS; CIRCUIT;
CANCEL; FIX; READ; MEMORY; ONE; FIELD; MEMORY; FIX; FIX; LUMP; MEMORY;
FIELD; MEMORY; AFTER; COMPLETE; WRITING; READ; IMAGE; DATA; FIELD; MEMORY

Derwent Class: P85; T01; W02; W03; W04

International Patent Class (Main): H04N-005/45

International Patent Class (Additional): G09G-005/00; G09G-005/14;

G09G-005/36; G09G-005/397; G09G-005/399; H04N-001/393

File Segment: EPI; EngPI

Set	Items	Description
S1	158	AU=(AYERS, R? OR AYERS R?)
S2	58	AU=(SITES, R? OR SITES R?)
S3	0	S1 AND S2
S4	0	(S1 OR S2) AND (PAGE? OR LINE? OR TEXTPAGE? OR TEXTLINE) (3-N) (SPLIT? OR DIVIDE? OR WRAP? OR REWRAP? OR REFLOW? OR DIVID?)
S5	1	(S1 OR S2) AND (PDF? OR PDL? OR PS OR POSTSCRIPT? OR POST(-)SCRIPT? OR PORTABLE()DOCUMENT()FORMAT? OR PAGE()DESCRIPTION)
File	2:INSPEC 1969-2003/Nov W2	(c) 2003 Institution of Electrical Engineers
File	8:Ei Compendex(R) 1970-2003/Nov W2	(c) 2003 Elsevier Eng. Info. Inc.
File	35:Dissertation Abs Online 1861-2003/Oct	(c) 2003 ProQuest Info&Learning
File	65:Inside Conferences 1993-2003/Nov W3	(c) 2003 BLDSC all rts. reserv.
File	636:Gale Group Newsletter DB(TM) 1987-2003/Nov 17	(c) 2003 The Gale Group
File	434:SciSearch(R) Cited Ref Sci 1974-1989/Dec	(c) 1998 Inst for Sci Info
File	275:Gale Group Computer DB(TM) 1983-2003/Nov 17	(c) 2003 The Gale Group
File	16:Gale Group PROMT(R) 1990-2003/Nov 17	(c) 2003 The Gale Group

5/5/1 (Item 1 from Issue: 275)

DIALOG(R) File 275:Gale Group Computer DB(TM)

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01585122 SUPPLIER NUMBER: 13416376 (USE FORMAT 7 OR 9 FOR FULL TEXT)

Alpha AXP architecture. (includes glossary of terms) (one of four articles
on DEC's Alpha architecture) (Cover Story)
Sites, Richard L.

Communications of the ACM, v36, n2, p33(12)

Feb, 1993

DOCUMENT TYPE: Cover Story ISSN: 0001-0782 LANGUAGE: ENGLISH

RECORD TYPE: FULLTEXT; ABSTRACT

WORD COUNT: 7358 LINE COUNT: 00600

ABSTRACT: DEC's Alpha AXP 64-bit reduced instruction set computing (RISC) architecture was designed to provide high performance, longevity and easy migration from the VAX and MIPS architectures, and to run the Open VMS AXP and Unix operating systems. The architecture uses a split register file to support aggressive multiple issue. The architecture includes shared-memory multiprocessing without strict multiprocessor read/write ordering. The architecture's three basic types of data are integer, VAX floating-point and IEEE floating-point. Memory for the architecture is byte-addressed with access to longwords or quadwords, and virtual addresses of 64 bits. Memory also allows two processors to access adjacent longwords simultaneously. The architecture's basic instruction formats are Memory, Branch, Operate and CALL_PAL, with five groups of register-to-register operate instructions, load and store instructions that only move data, three types of branch instructions and the PAL code supplying the foundation for an operating system. The architecture includes flexibility in many of its specifications to allow for future development.

Set	Items	Description
S1	80	AU=(AYERS, R? OR AYERS R?)
S2	78	AU=(SITES, R? OR SITES R?)
S3	3	S1 AND S2
S4	73	(S1 OR S2) AND IC=(G06F? OR H04L?)
S5	2	S4 AND (PDF OR POSTSCRIPT OR PS OR PORTABLE()DOCUMENT? OR - PDL OR PAGE()DESCRIPTION?)
S6	33	S4 AND (PAGE? OR WRAP? ? OR REWRAP? OR REFLOW? OR WORDWRAP- ?)
S7	0	S6 AND (PDA OR PERSONAL()DIGITAL()ASSIST? OR NEWTON? ? OR - PALMTOP? OR HANDHELD? OR HAND()HELD? OR PALM()TOP? OR PALM? ? OR PALMPILOT? OR CELLPHONE? OR CELL()PONE?)
S8	35	S3 OR S5 OR S6
S9	35	IDPAT (sorted in duplicate/non-duplicate order)
S10	24	IDPAT (primary/non-duplicate records only)
File 344:Chinese Patents Abs Aug 1985-2003/Apr (c) 2003 European Patent Office		
File 347:JAPIO Oct 1976-2003/Jul(Updated 031105) (c) 2003 JPO & JAPIO		
File 348:EUROPEAN PATENTS 1978-2003/Nov W02 (c) 2003 European Patent Office		
File 349:PCT FULLTEXT 1979-2002/UB=20031113,UT=20031106 (c) 2003 WIPO/Univentio		
File 350:Derwent WPIX 1963-2003/UD,UM &UP=200373 (c) 2003 Thomson Derwent		

10/5/1 (Item 1 from file: 350)
DIALOG(R)File 350:Derwent WPIX
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014415921 **Image available**
WPI Acc No: 2002-236624/200229
XRPX Acc No: N02-181942

Computer implemented electronic document comparison method involves comparing hash values of attribute, bitmap of pages of documents for pairing pages

Patent Assignee: ADOBE SYSTEMS INC (ADOB-N)

Inventor: **SITES R L**

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 6324555	B1	20011127	US 98143992	A	19980831	200229 B

Priority Applications (No Type Date): US 98143992 A 19980831

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 6324555	B1		19	G06F-017/21	

Abstract (Basic): US 6324555 B1

NOVELTY - The hash values of attribute, bitmap, subset of bitmap of the **pages** of a document (B), are compared with corresponding hash values of a document (A) stored in respective hash tables, for pairing the **pages** of documents. A **page** of a particular document remaining unpaired, is paired with a blank **page** of the other document. Difference between unmatched **pages** is highlighted on a visual rendering of the **pages**.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for program product for electronic document comparison.

USE - For **page** -by- **page** basis comparison of electronic documents such as **portable document** format (PDF) file, documents written in HTML, SQML, XML, **Postscript** containing text, graphics, images, color spaces and annotation objects, using computer.

ADVANTAGE - Enables effectively comparing the documents containing graphical contents as well as plain text files in a short time, using hash values for comparison.

DESCRIPTION OF DRAWING(S) - The figure shows the flowchart explaining **page** -by- **page** comparison process of documents.

pp; 19 DwgNo 1/9

Title Terms: COMPUTER; IMPLEMENT; ELECTRONIC; DOCUMENT; COMPARE; METHOD; COMPARE; HASH; VALUE; ATTRIBUTE; **PAGE** ; DOCUMENT; PAIR; **PAGE**

Derwent Class: T01

International Patent Class (Main): **G06F-017/21**

File Segment: EPI

10/5/2 (Item 2 from file: 350)
DIALOG(R)File 350:Derwent WPIX
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014320633 **Image available**
WPI Acc No: 2002-141335/200219
XRPX Acc No: N02-106839

Electronic document processing method for document editing and managing system, involves detecting and storing nature of differences between new version and immediate previous version of document

Patent Assignee: ADOBE SYSTEMS INC (ADOB-N)

Inventor: **AYERS R M ; PRAVETZ J D; SITES R L**

Number of Countries: 027 Number of Patents: 003

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
EP 1083492	A2	20010314	EP 2000307084	A	20000818	200219 B
JP 2001125812	A	20010511	JP 2000264058	A	20000831	200219
CA 2317309	A1	20010302	CA 2317309	A	20000829	200219

Priority Applications (No Type Date): US 99389843 A 19990

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

EP 1083492 A2 E 8 G06F-017/24

Designated States (Regional): AL AT BE CH CY DE DK ES FI FR GB GR IE IT

LI LT LU LV MC MK NL PT RO SE SI

JP 2001125812 A 7 G06F-012/00

CA 2317309 A1 E G06F-017/20

Abstract (Basic): EP 1083492 A2

NOVELTY - A new version and immediate previous version of electronic document are compared to detect the nature of differences between them. The detected differences are then stored in the electronic document.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for computer program product for processing electronic document.

USE - For document editing and managing system to manage versions of electronic documents.

ADVANTAGE - Eliminates the need to recalculate the nature of the differences in versions, each time the electronic document is opened. Because the user sees the nature of the differences, the user can quickly confirm that only differences of an appropriate kind have been made to a document.

DESCRIPTION OF DRAWING(S) - The figure shows a flowchart explaining electronic document processing method.

pp; 8 DwgNo 1/2

Title Terms: ELECTRONIC; DOCUMENT; PROCESS; METHOD; DOCUMENT; EDIT; MANAGE; SYSTEM; DETECT; STORAGE; NATURE; DIFFER; NEW; VERSION; IMMEDIATE; VERSION ; DOCUMENT

Derwent Class: T01

International Patent Class (Main): G06F-012/00; G06F-017/20; G06F-017/24

International Patent Class (Additional): G06F-017/27; G06F-017/30;

G06F-017/60

File Segment: EPI

10/5/3 (Item 3 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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010655924 **Image available**

WPI Acc No: 1996-152877/199616

XRPX Acc No: N96-128411

Identification system for words in page of portable electronic document - analyses gaps between text objects using position data and adds words which are identified as text objects to word list

Patent Assignee: ADOBE SYSTEMS INC (ADOB-N)

Inventor: AYERS R M ; PAKNAD M D

Number of Countries: 009 Number of Patents: 007

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
EP 702322	A2	19960320	EP 95303939	A	19950608	199616 B
CA 2153377	A	19960313	CA 2153377	A	19950706	199626
JP 8249329	A	19960927	JP 95233974	A	19950912	199649
EP 702322	A3	19970604	EP 95303939	A	19950608	199732
US 5832530	A	19981103	US 94304678	A	19940912	199851
			US 97884003	A	19970627	
EP 702322	B1	20020213	EP 95303939	A	19950608	200212
DE 69525401	E	20020321	DE 625401	A	19950608	200227
			EP 95303939	A	19950608	

Priority Applications (No Type Date): US 94304678 A 19940912; US 97884003 A 19970627

Cited Patents: No-SR.Pub; 3.Jnl.Ref; EP 544431; JP 61243531

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

EP 702322 A2 E 28 G06K-009/68

Designated States (Regional): DE FR GB IT NL SE

CA 2153377 A G06K-009/00

JP 8249329 A 26 G06F-017/24
EP 702322 A3 G06K-009/68
US 5832530 A G06F-015/00 Cont of application US 94304678
EP 702322 B1 E G06K-009/20
Designated States (Regional): DE FR GB IT NL SE
DE 69525401 E G06K-009/20 Based on patent EP 702322

Abstract (Basic): EP 702322 A

The identification system includes a digital computer which stores a **page** of portable electronic document as a file. The file includes several characters which have not been identified as words. A word identifier is implemented on a data processor. The identifier analyses the character is of multiple lines of the **page** to create a word list of words in the **page**.

A scattered document identifier is implemented on the data processor. This determines whether the **page** requires sorting. Each character is part of a text segment. Each text segment has an associated x,y coordinate pair indicating its location on the **page**.

USE/ADVANTAGE - For display on laser printer or computer monitor.
Suitable for wide variety of different formats.

Dwg.4/16

Title Terms: IDENTIFY; SYSTEM; WORD; **PAGE** ; PORTABLE; ELECTRONIC; DOCUMENT
; ANALYSE; GAP; TEXT; OBJECT; POSITION; DATA; ADD; WORD; IDENTIFY; TEXT;
OBJECT; WORD; LIST

Derwent Class: T01; T04

International Patent Class (Main): G06F-015/00 ; G06F-017/24 ;
G06K-009/00; G06K-009/20; G06K-009/68

International Patent Class (Additional): G06F-017/21

File Segment: EPI

10/5/4 (Item 4 from file: 350)
DIALOG(R)File 350:Derwent WPIX
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010644239 **Image available**
WPI Acc No: 1996-141193/199615
XRPX Acc No: N96-118204

**Word identification system for page description language file -
provides contents of word buffer to client process as identified word and
searches for words in page description file**

Patent Assignee: ADOBE SYSTEMS INC (ADOB-N)

Inventor: **AYERS R M**

Number of Countries: 009 Number of Patents: 005

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
EP 701223	A2	19960313	EP 95305330	A	19950731	199615 B
CA 2154952	A	19960313	CA 2154952	A	19950728	199626
JP 8194697	A	19960730	JP 95234392	A	19950912	199640
EP 701223	A3	19970528	EP 95305330	A	19950731	199732
US 5832531	A	19981103	US 94304762	A	19940912	199851
			US 97884004	A	19970627	

Priority Applications (No Type Date): US 94304762 A 19940912; US 97884004 A
19970627

Cited Patents: No-SR.Pub; 2.Jnl.Ref; EP 544431; JP 61243531

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

EP 701223 A2 E 25 G06K-009/20

Designated States (Regional): DE FR GB IT NL SE

JP 8194697 A 26 G06F-017/21

US 5832531 A G06F-015/00 Cont of application US 94304762

CA 2154952 A G06F-007/04

EP 701223 A3 G06K-009/20

Abstract (Basic): EP 701223 A

The system includes a data processor which stores a **page**
description language file. The file includes several characters which

have not been identified as words by the language. A word identifier is applied to the data processor for reading the **page description** language file.

Characters are grouped to form at least one word. A client process processes words and requests words to process. One word is transferred to the client process in response to the request. The word identifier reads the **page description** language file.

USE/ADVANTAGE - For laser printer or computer monitor. Searches for words in **PDL** file including different types of character and spacing characteristics and formatting variations. Easy to identify display characters.

Dwg.3/9

Title Terms: WORD; IDENTIFY; SYSTEM; **PAGE** ; DESCRIBE; LANGUAGE; FILE;
CONTENT; WORD; BUFFER; CLIENT; PROCESS; IDENTIFY; WORD; SEARCH; WORD;
PAGE ; DESCRIBE; FILE

Derwent Class: T01

International Patent Class (Main): **G06F-007/04** ; **G06F-015/00** ;
G06F-017/21 ; G06K-009/20

International Patent Class (Additional): **G06F-017/24**

File Segment: EPI

10/5/5 (Item 5 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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009324831 **Image available**

WPI Acc No: 1993-018295/199302

XRFX Acc No: N93-013934

**Computer performance improvements using simulated cache associativity -
simulates effect of set associative cache by detecting cache misses and
re-mapping pages on main memory**

Patent Assignee: DIGITAL EQUIP CORP (DIGI)

Inventor: **SITES R L**

Number of Countries: 037 Number of Patents: 012

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
WO 9222867	A1	19921223	WO 92US4281	A	19920521	199302	B
AU 9222474	A	19930112	AU 9222474	A	19920521	199317	
EP 543991	A1	19930602	EP 92914461	A	19920521	199322	
			WO 92US4281	A	19920521		
JP 5509189	W	19931216	WO 92US4281	A	19920521	199404	
			JP 93500873	A	19920521		
TW 219986	A	19940201	TW 91107803	A	19911003	199413	
AU 658914	B	19950504	AU 9222474	A	19920521	199526	
US 5442571	A	19950815	US 91716397	A	19910617	199538	
			US 94250315	A	19940527		
IL 102001	A	19960131	IL 102001	A	19920526	199617	
CA 2088779	C	19980901	CA 2088779	A	19920521	199845	
KR 9605443	B1	19960425	WO 92US4281	A	19920521	199915	
			KR 93700415	A	19930213		
EP 543991	B1	19990728	EP 92914461	A	19920521	199934	
			WO 92US4281	A	19920521		
DE 69229667	E	19990902	DE 629667	A	19920521	199942	
			EP 92914461	A	19920521		
			WO 92US4281	A	19920521		

Priority Applications (No Type Date): US 91716397 A 19910617; US 94250315 A 19940527

Cited Patents: Jnl.Ref

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

WO 9222867 A1 E 16 G06F-012/08

Designated States (National): AT AU BB BG BR CA CH DE DK ES FI GB HU JP
KP KR LK LU MG MW NL NO PL RO RU SD SE

Designated States (Regional): AT BE CH DE DK ES FR GB GR IT LU MC NL OA
SE

AU 9222474 A G06F-012/08 Based on patent WO 9222867

EP 543991 A1 E G06F-012/08 Based on patent WO 9222867
 Designated States (Regional): BE CH DE ES FR GB IT LI NL SE
 JP 5509189 W G06F-012/08 Based on patent WO 9222867
 AU 658914 B G06F-012/08 Previous Publ. patent AU 9222474
 Based on patent WO 9222867
 US 5442571 A 9 G06F-012/08 Cont of application US 91716397
 EP 543991 B1 E G06F-012/08 Based on patent WO 9222867
 Designated States (Regional): BE CH DE ES FR GB IT LI NL SE
 DE 69229667 E G06F-012/08 Based on patent EP 543991
 Based on patent WO 9222867
 TW 219986 A G06F-013/00
 IL 102001 A G06F-012/06
 CA 2088779 C G06F-012/02
 KR 9605443 B1 G06F-012/08

Abstract (Basic): WO 9222867 A

The computer system is operated to simulate the effect of a set associative cache by detecting cache misses and remapping **pages** in the main memory. This enables memory references which would have caused thrashing to coexist in the cache.

For a CPU executing a virtual memory operating system, a **page** of data or instructions can be moved to a different physical **page** frame but remain the same virtual address. This is accomplished by updating the **page** mapping tables to reflect the new physical location of the **page**, and copying the data from the old **page** frame to the new one.

ADVANTAGE - Performance of computer system is improved because thrashing will no longer result.

Dwg.3/5

Title Terms: COMPUTER; PERFORMANCE; IMPROVE; SIMULATE; CACHE; SIMULATE; EFFECT; SET; ASSOCIATE; CACHE; DETECT; CACHE; MISS; MAP; **PAGE**; MAIN; MEMORY

Derwent Class: T01

International Patent Class (Main): G06F-012/02 ; G06F-012/06 ; G06F-012/08 ; G06F-013/00

File Segment: EPI

10/5/6 (Item 6 from file: 350)
 DIALOG(R)File 350:Derwent WPIX
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008882268 **Image available**
 WPI Acc No: 1992-009537/199202
 XRPX Acc No: N92-007332

Granularity hint for translation buffer in high performance processor - uses translation buffer to store number of page table entries containing page frame numbers and granularity hint

Patent Assignee: DIGITAL EQUIP CORP (DIGI)

Inventor: **SITES R L** ; WITEK R T

Number of Countries: 008 Number of Patents: 006

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
EP 463978	A	19920102	EP 91401784	A	19910628	199202 B
CA 2045789	A	19911230				199213
EP 463978	A3	19920617	EP 91401784	A	19910628	199333
TW 236691	A	19941221	TW 91106668	A	19910822	199510
US 5454091	A	19950926	US 90547600	A	19900629	199544
			US 93111284	A	19930824	
KR 218572	B1	19990901	KR 9110877	A	19910628	200104

Priority Applications (No Type Date): US 90547600 A 19900629; US 93111284 A 19930824

Cited Patents: NoSR.Pub; 2.Jnl.Ref; US 3675215

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
EP 463978	A				
					Designated States (Regional): DE FR GB NL
TW 236691	A			G06F-007/02	

US 5454091 A 22 G06F-012/10 Cont of application 90547600
KR 218572 B1 G06F-012/10

Abstract (Basic): EP 463978 A

A processor has a translation buffer for translating virtual addresses to physical addresses by storing in the translation buffer a number of **page** table entries. Each **page** table entry contains a **page** frame number indexed by a virtual address tag.

A granulating hint identifying the number of **pages** to be referenced by the **page** frame number is stored, for each **page** table, in the translation buffer. A part of the virtual address is added to the **page** frame number to generate a physical address. The size of the part is determined by the granularity hint.

USE/ADVANTAGE - High performance processors executing a reduced instruction set. A performance improvement is achieved by making use of unused bits in the standard sized instruction.

Dwg.1/11

Title Terms: GRANULE; TRANSLATION; BUFFER; HIGH; PERFORMANCE; PROCESSOR; TRANSLATION; BUFFER; STORAGE; NUMBER; **PAGE** ; TABLE; ENTER; CONTAIN;

PAGE ; FRAME; NUMBER; GRANULE

Derwent Class: T01

International Patent Class (Main): G06F-007/02 ; G06F-012/10

International Patent Class (Additional): G06F-009/34

File Segment: EPI

10/5/7 (Item 7 from file: 350)
DIALOG(R) File 350:Derwent WPIX
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008882267 **Image available**
WPI Acc No: 1992-009536/199202
XRPX Acc No: N92-007331

Branching in pipelined processor - decodes instructions before executing instructions to ensure optimal performance of code

Patent Assignee: DIGITAL EQUIP CORP (DIGI); COMPAQ COMPUTER CORP (COPQ)

Inventor: **SITES R L** ; WITEK R T

Number of Countries: 008 Number of Patents: 008

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
EP 463977	A	19920102	EP 91401783	A	19910628	199202 B
CA 2045791	A	19911230				199213
TW 198109	A	19930111	TW 91106670	A	19910822	199325
EP 463977	A3	19930922	EP 91401783	A	19910628	199509
EP 463977	B1	19980729	EP 91401783	A	19910628	199834
DE 69129881	E	19980903	DE 629881	A	19910628	199841
			EP 91401783	A	19910628	
KR 190252	B1	19990601	KR 9110880	A	19910628	200056
US 6167509	A	20001226	US 90547629	A	19900629	200103
			US 94243559	A	19940516	

Priority Applications (No Type Date): US 90547629 A 19900629; US 94243559 A 19940516

Cited Patents: NoSR.Pub; 3.Jnl.Ref; EP 219203

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

EP 463977 A
Designated States (Regional): DE FR GB NL

TW 198109 A G06F-009/00

EP 463977 B1 E G06F-009/38

Designated States (Regional): DE FR GB NL

DE 69129881 E G06F-009/38 Based on patent EP 463977

KR 190252 B1 G06F-009/38

US 6167509 A G06F-009/00 Cont of application US 90547629

Abstract (Basic): EP 463977 A

A pipelined processor is operated by fetching instructions from sequential addresses in memory and decoding the instructions before executing the instructions. The jump instructions are detected in the

LEGAL STATUS (Type, Pub Date, Kind, Text):

Refusal: 000607 A2 Date European patent application was refused:
20000127
Application: 970507 A2 Published application (A1with Search Report
;A2without Search Report)
Examination: 970507 A2 Date of filing of request for examination:
961206
Search Report: 970514 A3 Separate publication of the European or
International search report
Examination: 990915 A2 Date of dispatch of the first examination
report: 19990802
Change: 991201 A2 Legal representative(s) changed 19991012

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	EPAB97	1402
SPEC A	(English)	EPAB97	8358
Total word count - document A			9760
Total word count - document B			0
Total word count - documents A + B			9760

10/5/13 (Item 13 from file: 348)

DIALOG(R)File 348:EUROPEAN PATENTS

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00558347

AUTOMATIC FLOWGRAPH GENERATION FOR PROGRAM ANALYSIS AND TRANSLATION

AUTOMATISCHE FLOWGRAPHERZEUGUNG FUR ANALYSE UND UBERSETZUNG

**PRODUCTION AUTOMATIQUE D'ORGANIGRAMMES POUR L'ANALYSE ET LA TRADUCTION DE
PROGRAMMES**

PATENT ASSIGNEE:

DIGITAL EQUIPMENT CORPORATION, (313080), 146 Main Street, Maynard, MA
01754, (US), (Proprietor designated states: all)

INVENTOR:

SITES, Richard, L., 21 Warren Street, Boylston, MA 01505, (US)

LEGAL REPRESENTATIVE:

Charig, Raymond Julian et al (79692), Eric Potter Clarkson, Park View
House, 58 The Ropewalk, Nottingham NG1 5DD, (GB)

PATENT (CC, No, Kind, Date): EP 528028 A1 930224 (Basic)

EP 528028 B1 991013

WO 9215937 920917

APPLICATION (CC, No, Date): EP 92909257 920305; WO 92US1741 920305

PRIORITY (CC, No, Date): US 666196 910307

DESIGNATED STATES: DE; FR; GB; IT

INTERNATIONAL PATENT CLASS: **G06F-009/44**

CITED PATENTS (EP B): EP 372835 A; WO 90/01738 A

CITED PATENTS (WO A): WO 9001738 A; WO 9001738 A; EP 372835 A

CITED REFERENCES (EP B):

BYTE. vol. 14, no. 12, November 1989, ST PETERBOROUGH US pages 361 - 368;

HUNTER AND BANNING: 'DOS at RISC'

COMMUNICATIONS OF THE ASSOCIATION FOR COMPUTING MACHINERY. vol. 8, no.

12, December 1965, NEW YORK US pages 736 - 741; GAINES: 'On the

Translation of Machine Language Programs';

CITED REFERENCES (WO A):

BYTE. vol. 14, no. 12, November 1989, ST PETERBOROUGH US pages 361 - 368;

HUNTER AND BANNING: 'DOS at RISC'

COMMUNICATIONS OF THE ASSOCIATION FOR COMPUTING MACHINERY. vol. 8, no.

12, December 1965, NEW YORK US pages 736 - 741; GAINES: 'On the

Translation of Machine Language Programs';

NOTE:

No A-document published by EPO

LEGAL STATUS (Type, Pub Date, Kind, Text):

Oppn None: 000927 B1 No opposition filed: 20000714

Application: 930224 A1 Published application (A1with Search Report
;A2without Search Report)

Lapse: 010425 B1 Date of lapse of European Patent in a
contracting state (Country, date): GB

20000305,
 Examination: 930224 A1 Date of filing of request for examination: 921028
 Examination: 970507 A1 Date of despatch of first examination report: 970319
 Grant: 991013 B1 Granted patent
 Change: 991201 B1 Legal representative(s) changed 19991012
 LANGUAGE (Publication,Procedural,Application): English; English; English
 FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	9941	869
CLAIMS B	(German)	9941	842
CLAIMS B	(French)	9941	932
SPEC B	(English)	9941	29451
Total word count - document A			0
Total word count - document B			32094
Total word count - documents A + B			32094

10/5/14 (Item 14 from file: 348)
 DIALOG(R)File 348:EUROPEAN PATENTS
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00558236

SYSTEM AND METHOD FOR PRESERVING SOURCE INSTRUCTION ATOMICITY IN TRANSLATED PROGRAM CODE

System und Verfahren zur Konservierung der Unteilbarkeit eines Quellbefehls in übertragenen Programmbefehlen

SYSTEME ET PROCEDE DE PRESERVATION DE L'ATOMICITE D'UNE INSTRUCTION DE SOURCE DANS UN CODE DE PROGRAMME TRADUIT

PATENT ASSIGNEE:

DIGITAL EQUIPMENT CORPORATION, (313080), 146 Main Street, Maynard, MA 01754, (US), (applicant designated states: AT;BE;CH;DE;DK;ES;FR;GB;GR;IT;LI;NL;SE)

INVENTOR:

ROBINSON, Scott, G., 42 Davis Road, Tynsgboro, MA 01879, (US)
 SITES, Richard, L. , 21 Warren Street, Boylston, MA 01505, (US)
 WITEK, Richard, T., 8 Silver Birch Lane, Littleton, MA 01460, (US)

LEGAL REPRESENTATIVE:

Betten & Resch (101031), Reichenbachstrasse 19, 80469 Munchen, (DE)

PATENT (CC, No, Kind, Date): EP 537309 A1 930421 (Basic)
 EP 537309 B1 990602
 WO 9215946 920917

APPLICATION (CC, No, Date): EP 92908711 920303; WO 92US1715 920303

PRIORITY (CC, No, Date): US 666071 910307

DESIGNATED STATES: AT; BE; CH; DE; DK; ES; FR; GB; GR; IT; LI; NL; SE

INTERNATIONAL PATENT CLASS: G06F-009/455 ; G06F-009/44

CITED REFERENCES (WO A):

SIGPLAN NOTICES vol. 22, no. 7, July 1987, US pages 1 - 13; C. MAY:
 'MIMIC: A Fast System/370 Simulator'
 IEEE MICRO vol. 7, no. 1, February 1987, NEW YORK, US pages 60 - 71; K.
 J. MCNELEY ET AL.: 'Emulating a Complex Instruction Set Computer with a Reduced Instruction Set Computer';

NOTE:

No A-document published by EPO

LEGAL STATUS (Type, Pub Date, Kind, Text):

Oppn None: 000524 B1 No opposition filed: 20000303
 Application: 930421 A1 Published application (A1with Search Report ;A2without Search Report)
 Lapse: 031105 B1 Date of lapse of European Patent in a contracting state (Country, date): AT 19990602, BE 19990602, CH 19990602, LI 19990602, DK 19990902, ES 19990602, GB 20000303, NL 19990602, SE 19990602,
 Lapse: 020619 B1 Date of lapse of European Patent in a contracting state (Country, date): AT 19990602, BE 19990602, CH 19990602, LI 19990602, ES 19990602, GB 20000303, SE

No A-document published by EPO
 LEGAL STATUS (Type, Pub Date, Kind, Text):
 Application: 930303 A1 Published application (A1with Search Report
 ;A2without Search Report)
 Examination: 930303 A1 Date of filing of request for examination:
 921207
 Examination: 970514 A1 Date of despatch of first examination report:
 970327
 Grant: 980204 B1 Granted patent
 Oppn None: 990127 B1 No opposition filed
 LANGUAGE (Publication,Procedural,Application): English; English; English
 FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	9806	3532
CLAIMS B	(German)	9806	3213
CLAIMS B	(French)	9806	3755
SPEC B	(English)	9806	29943
Total word count - document A			0
Total word count - document B			40443
Total word count - documents A + B			40443

10/5/17 (Item 17 from file: 348)
 DIALOG(R) File 348:EUROPEAN PATENTS
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00493011

Data prefetch instruction in a reduced instruction set processor
Datenvorausladebefehl in einem Prozessor mit reduziertem Befehlssatz
Instruction de preextraction de donnees dans un processeur a jeu
d'instruction reduit

PATENT ASSIGNEE:

DIGITAL EQUIPMENT CORPORATION, (313080), 146 Main Street, Maynard, MA
 01754, (US), (applicant designated states: DE;FR;GB;NL)

INVENTOR:

Sites, Richard L., 21 Warren Street, Boylston, Massachusetts 01505,
 (US)

Witek, Richard T., 8 Silverbirch Lane, Littleton, Massachusetts 01460,
 (US)

LEGAL REPRESENTATIVE:

Lhoste, Catherine et al (57892), SOCIETE DE PROTECTION DES INVENTIONS 25,
 rue de Ponthieu, 75008 Paris, (FR)

PATENT (CC, No, Kind, Date): EP 463976 A2 920102 (Basic)
 EP 463976 A3 930825
 EP 463976 B1 981021

APPLICATION (CC, No, Date): EP 91401782 910628;

PRIORITY (CC, No, Date): US 547630 900629

DESIGNATED STATES: DE; FR; GB; NL

INTERNATIONAL PATENT CLASS: G06F-009/38

CITED REFERENCES (EP A):

PROCEEDINGS OF THE 1988 INTERNATIONAL CONFERENCE ON PARALLEL PROCESSING
 vol. 1, August 1988, PENN. US pages 118 - 125 C. SCHEURICH, M. DUBOIS
 'Concurrent Miss Resolution in Multiprocessor Caches'

IEEE TRANSACTIONS ON COMPUTERS vol. C-30, no. 10, October 1981, NEW YORK
 US pages 715 - 733 D. W. CLARK ET AL. 'The Memory System of a
 High-Performance Personal Computer'

THE 18TH ANNUAL INTERNATIONAL SYMPOSIUM ON COMPUTER ARCHITECTURE May
 1991, TORONTO CANADA pages 43 - 53 A. C. KLAIBER, H. M. LEVY 'An
 Architecture for Software-Controlled Data Prefetching'

SIGPLAN NOTICES vol. 26, no. 4, April 1991, US pages 40 - 52 D. CALLAHAN
 ET AL. 'Software Prefetching';

ABSTRACT EP 463976 A2

A high-performance CPU of the RISC (reduced instruction set) type
 employs a standardized, fixed instruction size, and permits only
 simplified memory access data width and addressing modes. The instruction
 set is limited to register-to-register operations and register load/store
 operations. Byte manipulation instructions, included to permit use of

previously-established data structures, include the facility for doing in-register byte extract, insert and masking, along with non-aligned load and store instructions. The provision of load/locked and store/conditional instructions permits the implementation of atomic byte writes. By providing a conditional move instruction, many short branches can be eliminated altogether. A conditional move instruction tests a register and moves a second register to a third if the condition is met; this function can be substituted for short branches and thus maintain the sequentiality of the instruction stream. Performance can be speeded up by predicting the target of a branch and prefetching the new instruction based upon this prediction; a branch prediction rule is followed that requires all forward branches to be predicted not-taken and all backward branches (as is common for loops) to be predicted as taken. Another performance improvement makes use of unused bits in the standard-sized instruction to provide a hint of the expected target address for jump and jump to subroutine instructions or the like. The target can thus be prefetched before the actual address has been calculated and placed in a register. In addition, the unused displacement part of the jump instruction can contain a field to define the actual type of jump, i.e., jump, jump to subroutine, return from subroutine, and thus place a predicted target address in a stack to allow prefetching before the instruction has been executed. The processor can employ a variable memory page size, so that the entries in a translation buffer for implementing virtual addressing can be optimally used. A granularity hint is added to the page table entry to define the page size for this entry. An additional feature is the addition of a prefetch instruction which serves to move a block of data to a faster-access cache in the memory hierarchy before the data block is to be used.

ABSTRACT WORD COUNT: 359

LEGAL STATUS (Type, Pub Date, Kind, Text):

Application: 920102 A2 Published application (Alwith Search Report
;A2without Search Report)
Search Report: 930825 A3 Separate publication of the European or
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Examination: 931229 A2 Date of filing of request for examination:
931102
Change: 950308 A2 Representative (change)
Examination: 961211 A2 Date of despatch of first examination report:
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Grant: 981021 B1 Granted patent
Oppn None: 991013 B1 No opposition filed: 19990722

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FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	9843	406
CLAIMS B	(German)	9843	462
CLAIMS B	(French)	9843	522
SPEC B	(English)	9843	12069
Total word count - document A			0
Total word count - document B			13459
Total word count - documents A + B			13459

10/5/18 (Item 18 from file: 348)

DIALOG(R)File 348:EUROPEAN PATENTS

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00493010

Byte-compare operation for high-performance processor

Bytevergleich-Operation fur einen hochleistungsfahigen Prozessor

Fonction de comparaison d'octets pour un processeur a haute performance

PATENT ASSIGNEE:

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PATENT (CC, No, Kind, Date): EP 463975 A2 920102 (Basic)
EP 463975 A3 931118
EP 463975 B1 990506
APPLICATION (CC, No, Date): EP 91401781 910628;
PRIORITY (CC, No, Date): US 547992 900629
DESIGNATED STATES: DE; FR; GB; NL
INTERNATIONAL PATENT CLASS: G06F-009/30

ABSTRACT EP 463975 A2

A high-performance CPU of the RISC (reduced instruction set) type employs a standardized, fixed instruction size, and permits only simplified memory access data width and addressing modes. The instruction set is limited to register-to-register operations and register load/store operations. Byte manipulation instructions, included to permit use of previously-established data structures, include the facility for doing in-register byte extract, insert and masking, along with non-aligned load and store instructions. The provision of load/locked and store/conditional instructions permits the implementation of atomic byte writes. By providing a conditional move instruction, many short branches can be eliminated altogether. A conditional move instruction tests a register and moves a second register to a third if the condition is met; this function can be substituted for short branches and thus maintain the sequentiality of the instruction stream. Performance can be speeded up by predicting the target of a branch and prefetching the new instruction based upon this prediction; a branch prediction rule is followed that requires all forward branches to be predicted not-taken and all backward branches (as is common for loops) to be predicted as taken. Another performance improvement makes use of unused bits in the standardized instruction to provide a hint of the expected target address for jump and jump to subroutine instructions or the like. The target can thus be prefetched before the actual address has been calculated and placed in a register. In addition, the unused displacement part of the jump instruction can contain a field to define the actual type of jump, i.e., jump, jump to subroutine, return from subroutine, and thus place a predicted target address in a stack to allow prefetching before the instruction has been executed. The processor can employ a variable memory page size, so that the entries in a translation buffer for implementing virtual addressing can be optimally used. A granularity hint is added to the page table entry to define the page size for this entry. An additional feature is the addition of a prefetch instruction which serves to move a block of data to a faster-access cache in the memory hierarchy before the data block is to be used.

ABSTRACT WORD COUNT: 359

LEGAL STATUS (Type, Pub Date, Kind, Text):

Lapse: 030212 B1 Date of lapse of European Patent in a contracting state (Country, date): NL 19990506,
Oppn None: 20000426 B1 No opposition filed: 20000208
Application: 920102 A2 Published application (A1with Search Report ;A2without Search Report)
Search Report: 931118 A3 Separate publication of the European or International search report
Examination: 940615 A2 Date of filing of request for examination: 940421
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LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	9918	435
CLAIMS B	(German)	9918	432

CLAIMS B	(French)	9918	463
SPEC B	(English)	9918	12771
Total word count - document A			0
Total word count - document B			14101
Total word count - documents A + B			14101

10/5/19 (Item 19 from file: 348)
DIALOG(R) File 348:EUROPEAN PATENTS
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00493009

Branch elimination in a reduced instruction set processor.
Entfernung von Sprungen in einem Prozessor mit reduziertem Befehlssatz.
Elimination de branchements dans un processeur a jeu d'instructions reduit.
PATENT ASSIGNEE:

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PATENT (CC, No, Kind, Date): EP 465328 A2 920108 (Basic)
EP 465328 A3 931201

APPLICATION (CC, No, Date): EP 91401780 910628;

PRIORITY (CC, No, Date): US 547684 900629

DESIGNATED STATES: DE; FR; GB; NL

INTERNATIONAL PATENT CLASS: G06F-009/38

CITED PATENTS (EP A): EP 223273 A; GB 1480209 A

CITED REFERENCES (EP A):

S. B. FURBER 'VLSI RISC Architecture and Organization' 1989 , MARCEL
DEKKER, INC. , NEW YORK, US.

MICROPROCESSORS AND MICROSYSTEMS vol. 13, no. 9, November 1989, LONDON GB
pages 579 - 587 G. B. STEVEN ET AL. 'HARP: A Parallel Pipelined RISC
Processor'

IBM TECHNICAL DISCLOSURE BULLETIN. vol. 14, no. 7, December 1971, NEW
YORK US page 2109 J. R. BROWN, L. D. LARSEN 'Conditionally Executable
Instructions';

ABSTRACT EP 465328 A2

A high-performance CPU of the RISC (reduced instruction set) type employs a standardized, fixed instruction size, and permits only simplified memory access data width and addressing modes. The instruction set is limited to register-to-register operations and register load/store operations. Byte manipulation instructions, included to permit use of previously-established data structures, include the facility for doing in-register byte extract, insert and masking, along with non-aligned load and store instructions. The provision of load/locked and store/conditional instructions permits the implementation of atomic byte writes. By providing a conditional move instruction, many short branches can be eliminated altogether. A conditional move instruction tests a register and moves a second register to a third if the condition is met; this function can be substituted for short branches and thus maintain the sequentiality of the instruction stream. Performance can be speeded up by predicting the target of a branch and prefetching the new instruction based upon this prediction; a branch prediction rule is followed that requires all forward branches to be predicted not-taken and all backward branches (as is common for loops) to be predicted as taken. Another performance improvement makes use of unused bits in the standard-sized instruction to provide a hint of the expected target address for jump and jump to subroutine instructions or the like. The target can thus be prefetched before the actual address has been calculated and placed in a register. In addition, the unused displacement part of the jump instruction can contain a field to define the actual type of jump, i.e.,

jump, jump to subroutine, return from subroutine, and then place a predicted target address in a stack to allow prefetching before the instruction has been executed. The processor can employ a variable memory page size, so that the entries in a translation buffer for implementing virtual addressing can be optimally used. A granularity hint is added to the page table entry to define the page size for this entry. An additional feature is the addition of a prefetch instruction which serves to move a block of data to a faster-access cache in the memory hierarchy before the data block is to be used.

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Examination: 961211 A2 Date of despatch of first examination report:
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CLAIMS A	(English)	EPABF1	509
SPEC A	(English)	EPABF1	12011
Total word count - document A			12520
Total word count - document B			0
Total word count - documents A + B			12520

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DIALOG(R)File 348:EUROPEAN PATENTS

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00493000

Branch prediction in high performance processor.

Sprungvorhersage in einem hochleistungsfahigen Prozessor.

Prediction de branchements dans un processeur a haute performance.

PATENT ASSIGNEE:

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PATENT (CC, No, Kind, Date): EP 463973 A2 920102 (Basic)
EP 463973 A3 931201

APPLICATION (CC, No, Date): EP 91401771 910627;

PRIORITY (CC, No, Date): US 547589 900629

DESIGNATED STATES: DE; FR; GB; NL

INTERNATIONAL PATENT CLASS: G06F-009/38

CITED PATENTS (EP A): EP 207665 A; EP 320098 A

CITED REFERENCES (EP A):

PATENT ABSTRACTS OF JAPAN vol. 11, no. 37 (P-543) (2484) 4 February 1987;

ABSTRACT EP 463973 A2

A high-performance CPU of the RISC (reduced instruction set) type employs a standardized, fixed instruction size, and permits only simplified memory access data width and addressing modes. The instruction set is limited to register-to-register operations and register load/store operations. Byte manipulation instructions, included to permit use of previously-established data structures, include the facility for doing

in-register byte extractions, insert and masking, along with non-aligned load and store instructions. The provision of load/locked and store/conditional instructions permits the implementation of atomic byte writes. By providing a conditional move instruction, many short branches can be eliminated altogether. A conditional move instruction tests a register and moves a second register to a third if the condition is met; this function can be substituted for short branches and thus maintain the sequentiality of the instruction stream. Performance can be speeded up by predicting the target of a branch and prefetching the new instruction based upon this prediction; a branch prediction rule is followed that requires all forward branches to be predicted not-taken and all backward branches (as is common for loops) to be predicted as taken. Another performance improvement makes use of unused bits in the standard-sized instruction to provide a hint of the expected target address for jump and jump to subroutine instructions or the like. The target can thus be prefetched before the actual address has been calculated and placed in a register. In addition, the unused displacement part of the jump instruction can contain a field to define the actual type of jump, i.e., jump, jump to subroutine, return from subroutine, and thus place a predicted target address in a stack to allow prefetching before the instruction has been executed. The processor can employ a variable memory page size, so that the entries in a translation buffer for implementing virtual addressing can be optimally used. A granularity hint is added to the page table entry to define the page size for this entry. An additional feature is the addition of a prefetch instruction which serves to move a block of data to a faster-access cache in the memory hierarchy before the data block is to be used.

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LEGAL STATUS (Type, Pub Date, Kind, Text):

Application: 920102 A2 Published application (A1with Search Report
;A2without Search Report)
Search Report: 931201 A3 Separate publication of the European or
International search report
Examination: 940629 A2 Date of filing of request for examination:
940504
Change: 950308 A2 Representative (change)
Examination: 961211 A2 Date of despatch of first examination report:
961029
Withdrawal: 981223 A2 Date on which the European patent application
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CLAIMS A	(English)	EPABF1	443
SPEC A	(English)	EPABF1	11993
Total word count - document A			12436
Total word count - document B			0
Total word count - documents A + B			12436

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DIALOG(R) File 348:EUROPEAN PATENTS

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00492999

In-register data manipulation in reduced instruction set processor

Registerhaltige Datenbearbeitung in einem Prozessor mit reduziertem Befehlssatz

Manipulation de donnees en registre dans un processeur a jeu d'instructions reduit

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INVENTOR:

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